National Aeronautics and Space Administration

NASA's Impact in New York: A Tech Transfer Perspective

You know that NASA studies our planet, our sun, the solar system, and the Universe.
But did you know about the space program's economic impact here on Earth?

In 2011, NASA invested **$80 million** in the state of New York.

Since 2001, NASA's SBIR/STTR Program has invested nearly **$40 million** in **47 New York companies** and more than **$1.2 billion** nationwide.

How NASA's SBIR/STTR Program Benefits New York

NASA is committed to moving technologies and innovations into the mainstream of the U.S. economy, and the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program helps fulfill this goal.

SBIR/STTR stimulates technological innovation by encouraging small, high-tech companies—particularly minority and disadvantaged businesses—to partner with NASA to help meet its research and development needs in key technology areas. At the same time, this program strengthens small companies by enabling them to bring cutting-edge new products into the U.S. economy.

The list to the right highlights New York businesses that received SBIR/STTR contracts from NASA since 2001. **(Visit http://sbir.nasa.gov for more information on the SBIR/STTR program.)**

NASA SBIR/STTR Companies in New York

ACENT Laboratories, LLC	Bohemia
Agave BioSystems, Inc.	Ithaca
AMBP Tech Corporation	Tonawanda
Amseta Corporation	Coram
Anvik Corporation	Hawthorne
Applied Biomathematics	Setauket
Applied Science Innovations, Inc.	Troy
Atair Aerospace, Inc.	Brooklyn
Avant Analysis Technology	Ithaca
Aymont Technology, Inc.	Ballston Spa
Bethpage Technologies, Inc.	Dix Hills
Bettergy Corporation	Croton-on-Hudson
Ceralink, Inc.	Troy
Clear Science Corporation	Harford
CompSys Technologies, Inc.	Amherst
Cox & Company, Inc.	Plainview
Dimension Technologies, Inc.	Rochester
Final Frontier Design	Brooklyn
Free Form Fibers, LLC	Saratoga Springs
GrammaTech, Inc.	Ithaca
Honeybee Robotics	New York City
HYPRES, Inc.	Elmsford
Impact Technologies, LLC	Rochester
Innova Products Corporation	New York City
Innovative Dynamics, Inc.	Ithaca
International Electronic Machines Corp.	Troy
JJW Consulting, Inc.	North Amityville
Kent Optronics, Inc.	Hopewell Junction
Kitware, Inc.	Clifton Park
MagiQ Technologies, Inc.	New York City
MesoScribe Technologies, Inc.	St. James
Mohawk Innovative Technology, Inc.	Albany
MTECH Laboratories, LLC	Ballston Spa
Optimax Systems, Inc.	Ontario
Phoebus Optoelectronics, LLC	New York City
Pragmasoft, Inc.	Delmar
Propulsive Wing, LLC	Elbridge
QED Technologies, Inc.	Rochester
QEL	Brooklyn
Reflective X-ray Optics, LLC	New York City
Reveo, Inc.	Hawthorne
Simmetrix, Inc.	Clifton Park
Sorceron, Inc.	New York City
Starfire Systems, Inc.	Schenectady
STI Technologies, Inc.	Rochester
The Manufactory, LLC	Brooklyn
XC Associates	Stephentown

new york

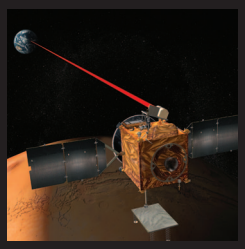
How NASA Spinoffs Benefit New York

SBIR Partnership Improves High-Precision Optics *(Rochester)*
In high-precision optics, aspheres enable higher quality images, but they have traditionally been time-consuming and expensive to manufacture. Under a NASA SBIR contract, QED Technologies has developed an interferometer that enables aspheres to become more integrated into optical devices. QED's interferometer is in such high demand that it has remained in a sold-out state since being introduced in 2009.

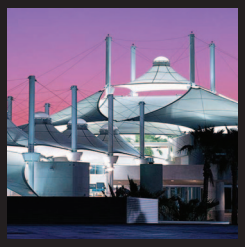
Do-It-Yourself Product Restores Automotive Air Conditioning *(Tarrytown)*
A NASA technology originally developed to keep astronauts comfortable and cool while inside a spacecraft is now being marketed as an automotive air conditioning product. The product, marketed by IDQ, Inc., replaces lost refrigerant and oil in automotive air conditioners to restore effective cooling. Thanks to NASA, nearly anyone can safely, effectively, and affordably recharge a vehicle's air conditioning unit.

Nontoxic Resins Enable Safer Manufacturing *(New York City)*
UBE America, Inc. has licensed a NASA polyimide matrix resin for use in aerospace manufacturing. The resin is strong, tough, lighter than metal alloys, and resists microcracks that result from temperature fluctuations. Because it is nontoxic, the resin creates a safer environment for workers. UBE America is currently partnering with major aerospace companies on high-temperature applications for aircraft.

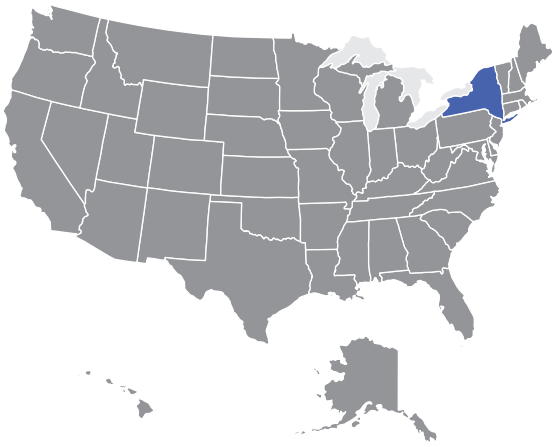
Sensor Detects Pathogens Before They Spread *(Troy)*
NASA's search for signs of life on Mars has led to a potentially life-saving biosensor capable of sensing pathogens in water. Early Warning, Inc.'s sensor detects waterborne pathogens, such as *E. coli*, Giardia, and Salmonella, in just 3 hours. This represents a drastic improvement over typical laboratory-based water sampling, which can take 2-14 days. The technology, licensed from NASA, ensures water purity for food and beverages, analyzes recreational water quality, and improves safety in imported produce.



Advanced Sensors Boost Near Infrared Imaging *(Brooklyn)*
Amplification Technologies, Inc. (ATI), a subsidiary of PowerSafe Technology, received funding to help NASA establish its interplanetary communications networks. Through this partnership, ATI was able to develop a small, lightweight sensor with a fast response time, high voltage, thermal stability, and low noise. The commercial product has potential applications in satellite communications, data transmission from unmanned aerial vehicles, night vision goggles, near infrared cameras, and laser-based glucose monitoring.



NASA Fabrics Enhance Architecture Around the World *(Amherst)*
A fabric originally developed for Apollo space suits is now being used in major transportation hubs, sports facilities, convention centers, and other landmark structures throughout the world. Birdair, Inc. produces fiberglass fabric—ideal for large-scale, permanent roofs—that is lightweight, durable, non-flammable, and lasts up to 10 years longer than conventional roofing materials. NASA's fiberglass fabric has enabled Birdair to grow from a small company established in its founder's kitchen to a multimillion-dollar specialty contractor today.



NASA actively seeks partnerships with U.S. companies that can license NASA innovations and create "spinoffs" in areas such as health and medicine, consumer goods, transportation, renewable energy, and manufacturing. When businesses leverage NASA technologies to develop new products, it not only benefits the regional economy, but significantly strengthens the nation's competitiveness in the global marketplace.

NASA's centers across the country have helped 145 New York companies develop revolutionary spinoff technologies.

Learn more about how NASA innovations benefit the public in *Spinoff,* an annual publication that highlights NASA's most significant technology transfer successes. (Available at: http://www.sti.nasa.gov/tto)

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